

ALLEGHENY WINs

“WATERSHED IMPROVEMENT NEEDS”

COALITION

ANNUAL REPORT 2008



MISSION

To promote protection, restoration, and habitat improvement activities in watersheds that lie entirely or partially in the Allegheny National Forest to achieve Forest Service and community needs through collaboration and partnerships.

Cover photograph: The Allegheny River in early fall near Tionesta, PA, taken by Chuck Williams.

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What is Allegheny WINS?

Northwestern Pennsylvania is fortunate to have many miles of high quality rivers and streams. The Allegheny River, a federally designated Wild and Scenic River, is the centerpiece of the half-million acre Allegheny National Forest. The Allegheny and its major tributaries Tionesta Creek and the Clarion River, are well known for their recreational value and high quality fisheries. Healthy populations of sport fish such as trout, bass, walleye, muskellunge and pike share these waters with rare and endangered species of turtles, mussels, amphibians, invertebrates and fish. Rich riparian zones provide feeding areas, nesting areas, and travel corridors for waterfowl, birds of prey and other wildlife. Thousands of miles of smaller streams are home to our state fish, the eastern brook trout.

The scenic waters of the Allegheny region appear to run clean and pure, and in fact some are now in better condition than they were years ago. The Allegheny River, Clarion River, and Tionesta Creek each support healthy fisheries, which was not always the case. From the late 1800s through the mid 1900s, the rivers were spoiled by pollution from pulp mills, tanneries, mines, intense oil and gas exploration and timber harvests. As these industries faded, conservation measures were implemented and the waters began to heal and recover.

Unfortunately new threats have arisen to again threaten our waters. Impacted by decades of acid rain and industrial pollution, the Allegheny's aquatic ecosystems are now being stressed by booms in oil and gas development and outdoor recreational activities. The number of miles of impaired streams is steadily increasing in the region, with some of the most vulnerable being our smaller headwater streams. These first and second order streams provide important habitat for fish and wildlife, and ensure that clean water flows to downstream communities by controlling sediment and nutrient loads. They also stabilize flow by preventing floods during storms and maintaining a base flow during periods of drought.

The region's freestone streams are vulnerable to acid deposition because the natural buffering capacity of the soils and geology is weak. An acid rain event can immediately lower the pH in streams and greatly reduce aquatic invertebrates and fish in large sections of streams.

The same streams that are affected by acid deposition often suffer from sedimentation from the existing dirt and gravel road network and construction of new roads. Over 2000 miles of oil and gas access roads and 1200 miles of Forest Service roads penetrate even the most remote corners of the National Forest. The native sandstone material used to construct these roads is comparatively soft, breaks down easily under traffic, and readily erodes into adjacent streams. As a result, gravel stream bottoms which are vital for fish reproduction, become embedded with mud and sand. Aquatic invertebrates are also unable to survive under these conditions so a primary source of food for fish is lost. The result is a loss of critical habitat for coldwater species and a reduction in overall

productivity of the stream. Sensitive species like trout have to migrate up into smaller tributaries or downstream into larger waters to survive.

Other issues related to dirt and gravel roads include elevated stream temperatures and poorly placed culverts and road crossings that act as barriers to fish passage. Several of the region's remote streams that once held healthy populations of brook trout, have become degraded because of these problems.

Most of the streams across the region lack habitat complexity created by large wood due to historic logging activities. The current habitat is largely defined by a high frequency of riffle and glide features with few pools. Since pool habitat is important for aquatic organism survival and propagation, streams in the region may not fully meet Pennsylvania designated protected water uses due to the lack of adequate aquatic habitat in the form of pools. Best management practices now encourage the protection of riparian areas by leaving stream buffers and limiting activity. In response to these policies, riparian areas are reaching an age where they are beginning to contribute large wood (e.g. small trees, limbs, and trees affected by mortality and windthrow) to stream channels. Large wood will help recover the ecological processes and functions in streams such as storage of sediment and coarse organic matter in small tributary streams and the creation of larger, deeper pools. It will take several more decades of careful riparian area stewardship before these ecological processes are fully affecting larger fish-bearing streams.

Normally, a healthy aquatic system will adjust to stress caused by changes in conditions, however when changes occur more quickly than the system can adjust, it becomes unstable resulting in degradation. This has been the case in and around the Allegheny National Forest. The situation is demanding greater protection of healthy and pristine watersheds and repair to the impaired ones.

In summary, the main environmental problems affecting Allegheny watersheds include:

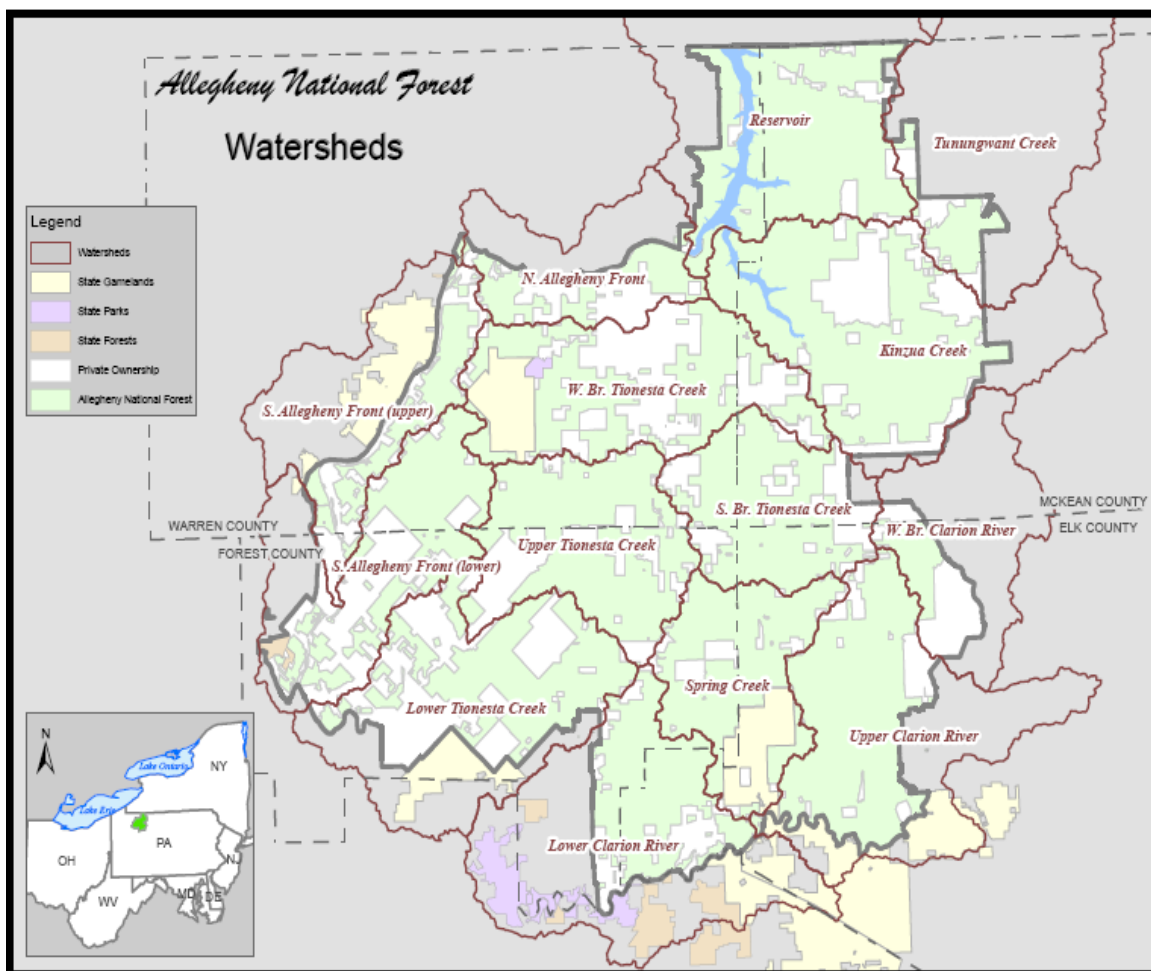
- Atmospheric deposition
- Sedimentation, erosion and in-stream habitat degradation from sandstone based roads used for timber and oil and gas well access
- Sedimentation and erosion problems associated with recreation such as camp sites, boat and canoe launches, and all terrain vehicle trails
- Fish barriers and habitat degradation around culverts, crossings and dams
- Lack of instream habitat for fish

In an economically active and large geographic area such as the Allegheny, these problems can be overwhelming for any single government agency or community based organization. To address the issues and find solutions to the problems, a group of like-minded non-profit organizations, private individuals, and local, state and federal government agencies decided to join forces and build a coalition. The common thread that binds the partners of this coalition is an interest in developing and promoting watershed restoration activities.

The Allegheny Watershed Improvement Needs Coalition (WINS) was formed in April 2007 with its mission **“to promote protection, restoration, and habitat improvement activities in watersheds that lie entirely or partially in the Allegheny National Forest to achieve Forest Service and community needs through collaboration and partnerships.”** The group’s main focus is on developing and implementing projects to protect and improve high quality watersheds and aquatic ecosystems and to restore impaired watersheds and aquatic ecosystems. It includes outreach and education campaigns targeting rural communities and youth as means of preventing problems from occurring in the future. In its first year, the Coalition has demonstrated success in project development, and this report documents its accomplishments.

Allegheny WINS is governed by a steering committee made up of representatives of municipal, county, state and federal government agencies, and leaders of various non-profit organizations such as the Western Pennsylvania Conservancy, Trout Unlimited and local watershed organizations. The group meets bimonthly at locations throughout the forest.

Where is Allegheny WINS?



Map courtesy of US Forest Service

Allegheny WINS projects are found on the half-million acre Allegheny National Forest and on neighboring State Forests, State Game Lands, and private lands in Northwestern Pennsylvania.

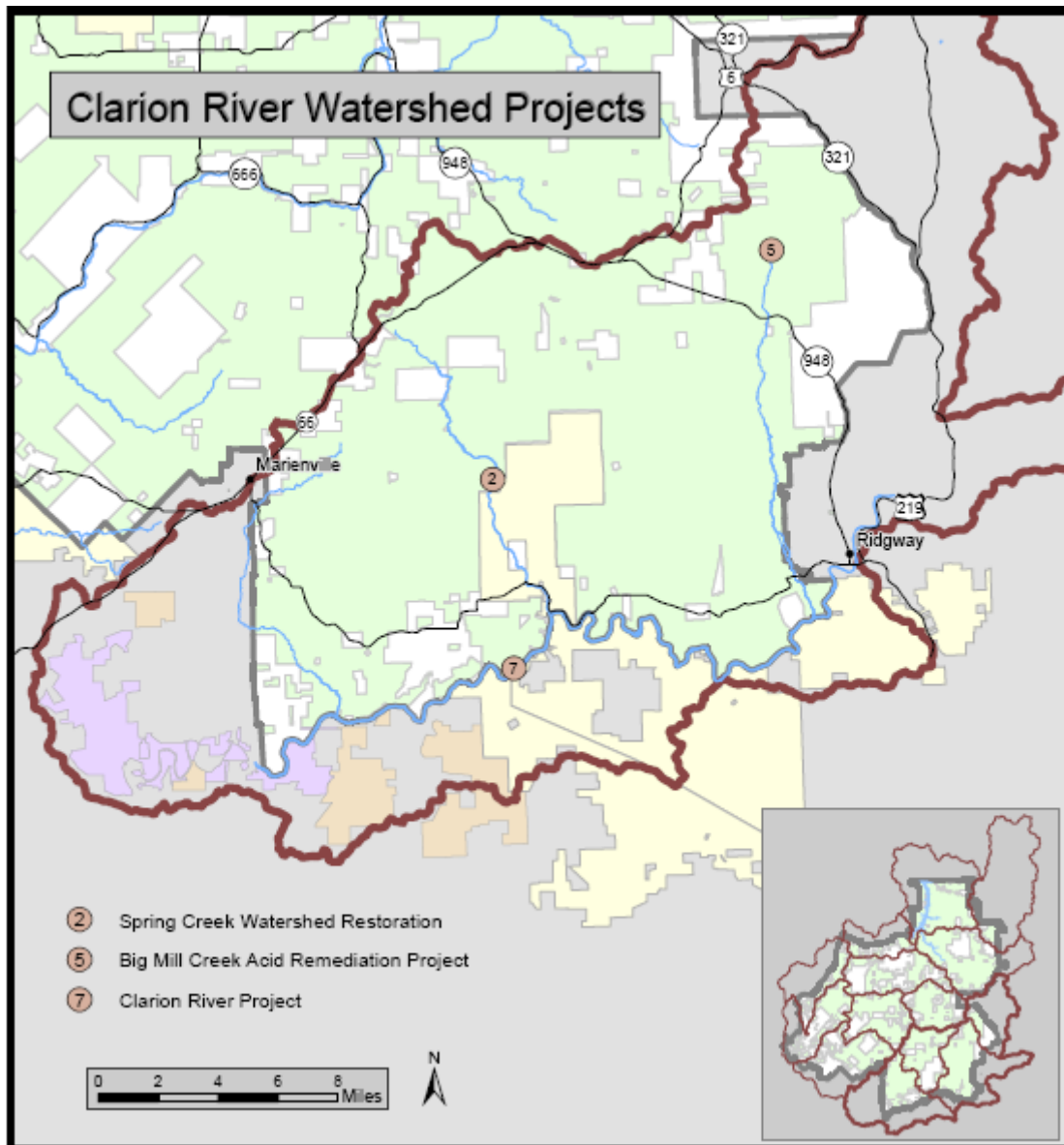
Allegheny WINS project area facts

- 14 major watersheds
- over 2000 miles of rivers and streams
- total area covers over 2500 square miles
- over 600,000 acres of public land
- over 3500 miles of dirt and gravel roads
- located within a day's drive of 1/3 of the nation's population

Clarion River Watershed Projects



The Clarion River near Clarington, PA



Map courtesy of US Forest Service

The Allegheny WINS Coalition sponsors three projects in the Clarion River drainage on Spring Creek, Big Mill Creek and on the mainstem of the Clarion River

Spring Creek Watershed Restoration

Partner - Sponsor: Western Pennsylvania Conservancy



Spring Creek below Forest Road # 130 crossing

Objectives and benefits

The Spring Creek watershed in Forest and Elk counties is a major tributary of the Clarion River, a federally designated Wild and Scenic River that forms the southern boundary of the Allegheny National Forest (ANF). The forests and waters of the Spring Creek watershed are recovering from decades of past exploitation from unsustainable timber harvest and industrial development. Today the watershed is prized for its recreational resources, timber base, and as a coldwater fishery.

The goal of this project is to restore and improve riparian and in-stream habitat throughout the drainage by reducing sedimentation, rehabilitating riparian areas, and removing barriers to fish passage.

Specific objectives of this project include:

- reconstruction of portions of the Forest Roads 130, 227 and 403 to improve drainage and reduce sedimentation
- elimination of fish passage barriers associated with the road crossings
- harden or decommission dispersed camp sites located along the roads
- hardening of existing parking areas to reduce sedimentation while improving access to the stream
- enhancement of instream habitat with log structures
- planting a diversity of trees along Spring Creek to establish a forested buffer

Financial support for this project has been provided by the Western Pennsylvania Conservancy, Pennsylvania Game Commission, Pennsylvania Fish & Boat Commission, National Forest Foundation, Garden Club of Pennsylvania and US Forest Service. Projects are scheduled to be completed on State Game Lands and National Forest properties.

This project will have substantive benefits for the ANF and local community. First, this project will have immediate effects on in-stream habitat in Spring Creek and ultimately the Clarion River through reduction of sedimentation. This will improve water quality and benefit both the coldwater fishery and aquatic biodiversity in the stream. Second, restoration of degraded riparian areas will have both ecological and aesthetic benefits and provide long-term stability to the stream bank. Finally, improved access to the stream via dedicated hardened parking and camping areas will benefit the local community that uses the stream for recreational purposes.



Rappe Run Channel Block

Community support and involvement

Community support and involvement will be cultivated in several ways. We will actively recruit volunteers and provide opportunities for hands-on involvement in riparian restoration and stream assessment. Local Trout Unlimited chapters, County Conservation Districts and school groups will be actively courted for volunteers. We will also inform the public about this project and volunteer opportunities through press releases and other media. Finally, we expect this project will be used as an active demonstration area by the Allegheny WINS Coalition to promote proper dirt and gravel road maintenance and the value of riparian restoration to watershed health and recreation.



Planting trees and shrubs in the riparian zone

Monitoring and evaluation

Success of this project will be determined by active monitoring and evaluation before and after implementation. Road sedimentation and runoff will be evaluated and monitored by visual means. In-stream sedimentation will be evaluated pre- and post-implementation at set stations above and below the project area using standard assessment techniques.

Whenever possible, we will use volunteers from the local community to assist in project monitoring. The new culvert will be monitored during installation to ensure that it is set into the streambed properly to allow for movement of fish and other aquatic species. This culvert will be physically evaluated post-construction to assess fish passage. Tree plantings will be monitored for success and establishment.



Sampling fish

Activities and Accomplishments

- Over 1000 trees and shrubs donated by Penny Pines and PA Game Commission's state nursery were planted in the riparian zone near FR 130 bridge by Marienville and Bradford Youth Conservation Corps.
- Western Pennsylvania Conservancy and the US Forest Service are coordinating the reconstruction of FR403.
- The US Forest Service is in the process of contracting for the limstoning of FR227 under a Stewardship Contract.
- Western Pennsylvania Conservancy, Pennsylvania Game Commission and the US Forest Service are working with Seneca Resources to reconstruct FR130 on SGL 28.
- Two culverts were replaced on FR 130 and FR131 over Raven's Run and Wolf Run. These culverts were aquatic passage barriers, undersized and causing downstream scour. These culverts were replaced with larger culverts, which were sized based on bankfull width and 100 year flood flows and buried into the stream channel. Due to the slope, only one was buried deep enough to allow for aquatic passage.
- 2000 feet of limestone was applied on the road surface on FR 130 and FR 131 at stream crossings to reduce sedimentation. Additional culverts were placed to divert runoff to the forest floor

- The PA Fish and Boat Commission completed the design for a habitat improvement project on Spring Creek immediately above the FR130 bridge.
- The US Forest Service and Western Pennsylvania Conservancy are obtaining permits in order to complete the project by summer 2009.
- Pre-project monitoring efforts were completed in June 2008.
- The US Forest Service worked with Eagle Scout, Raymond Gregg to construct two habitat structures (channel blocks) on Rappe Run in 2008.
- The US Forest Service, PA Fish and Boat Commission and Western Pennsylvania Conservancy developed plans and obtained permits for a stream bank stabilization project on Rappe Run to be completed in FY 2009.

Big Mill Creek Acid Remediation Project

Partner - Sponsor: Elk County Freshwater Association

Big Mill Creek is located in Elk County within the Allegheny National Forest (see #5 on map on page 9). Big Mill Creek originates just south of Kane, PA and flows in a southerly direction emptying into the Clarion River near the City of Ridgway.

The upper portion of the watershed above the Ridgway Reservoir, the targeted area for this project, is located almost entirely in the Allegheny National Forest (approximately 80% of the upper watershed).

The Elk County Freshwater Association (ECFA) is an organization with goals of 1) identifying and increasing public awareness of environmental impacts in local waters, 2) mitigating environmental impacts in order to improve, restore, and protect water quality and aquatic life, and 3) improving recreational opportunities for local and regional groups. The ECFA has targeted Big Mill Creek as their first watershed due to its value as a local fishery, recreational area and public water supply.

Historically, Big Mill Creek has been a valued stocked trout and wild brook trout fishery. The record of this fishery is well documented by the Pennsylvania Fish and Boat Commission (PFBC) with information dating to the 1940's. A review of this record indicates Big Mill Creek has deteriorated from long term and progressive acidification. Historic and recent sampling indicates Big Mill Creek is chronically acidified ($\text{pH} < 5$) in its headwaters and in a majority of tributaries resulting in the loss of wild brook trout. Lower reaches of Big Mill Creek are periodically acidified ($\text{pH} < 5.5$) during high flows with the most severe conditions occurring in late winter and early spring jeopardizing spring trout stocking. The acidification in Big Mill Creek has reached a level that the PFBC is considering removing Big Mill Creek from its stocking program which will eliminate recreational activities in the stream and many of its tributaries.

In order to address these problems, ECFA has initiated efforts to restore Big Mill Creek through alkalinity addition. The technology currently being pursued is a passive

treatment approach involving a combination system utilizing aerobic limestone basin (AeLB) and anaerobic vertical flow wetland (AVFW). The combination system will involve diversion, treatment, and return of a portion of the stream flow at several headwater tributary locations in the Big Mill Creek watershed. The diverted and treated stream flow will sufficiently elevate the alkalinity to mitigate both chronic and episodic acidification in the tributaries with the combination of projects preventing episodic acidification in lower Big Mill Creek. The goal is to maintain a base flow of pH > 6.5 and a storm flow of pH > 6. The combination of systems will restore water quality and aquatic life to at least 20 miles of Big Mill Creek and tributaries.

Key partners in this project include the Elk County Conservation District and the US Forest Service.

Activities and Accomplishments

- ECFA applied for and received two Growing Greener grants totaling \$450,000 for the completion of Phases I and II of the project.
- ECFA and USFS met in April 2008 to further plan and coordinate the project.
- USFS has completed a Phase I archeological survey in the project area.
- DEP, as the funding agency, completed pre-project monitoring in June 2008.
- ECFA applied for the required permits through *DEP*.
- ECFA and USFS continue to coordinate for use of the USFS, Construction & Maintenance Crew to construct (3-4) treatments ponds for ECFA.

Clarion River Efforts

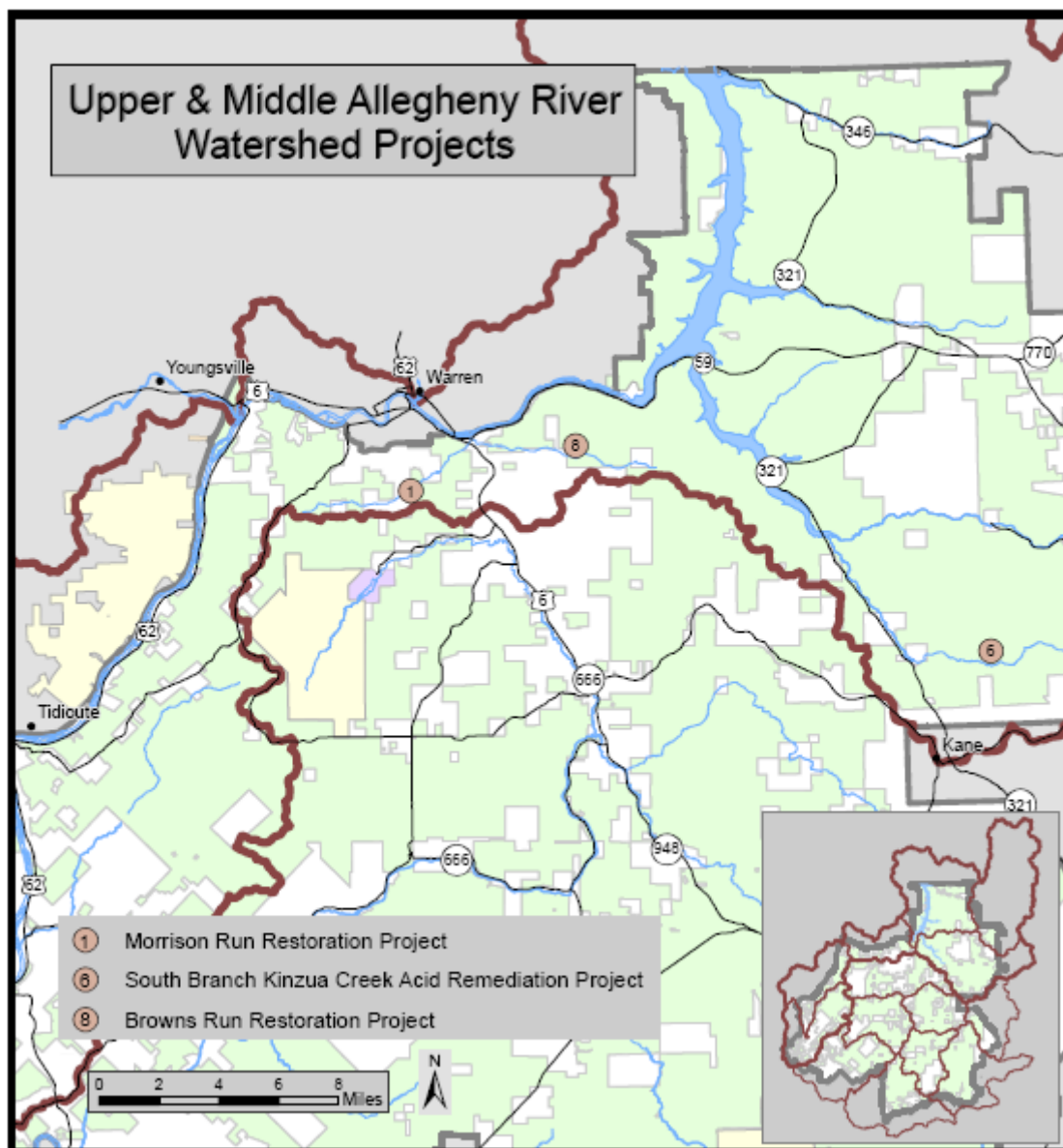
Activities and Accomplishments

- USFS, Clarion River Project, involves the installation of a “Sweet Smelling Toilet” and the streambank restoration projects to mitigate the impacts of intense, dispersed recreation.
- Clarion River Municipal Partnership and PA Cleanways sponsored a Litter Cleanup along the Upper Clarion in August 2008.
- PFBC is working with a consultant, Brenda Wyant, to improve access along the river.
- USFS began working to complete the Clarion Wild & Scenic River - Master Plan in October 2008. Coalition partners have been invited to participate in the development of the plan.

Upper and Middle Allegheny River Watershed Projects



The Allegheny River near Tionesta, PA



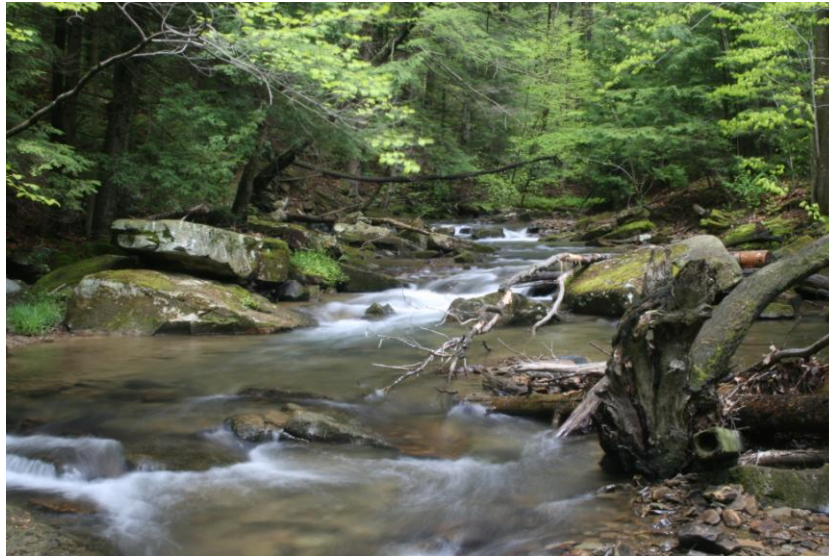
The Allegheny WINS Coalition sponsors three stream restoration projects in the Upper Allegheny River drainage on Morrison Run, South Branch of Kinzua Creek, and Brown's Run

Brown's Run Watershed Assessment

Partner - Sponsor: Western Pennsylvania Conservancy

Located in Warren County near the City of Warren, the Brown's Run watershed contains three streams classified as Exceptional Value (EV) – Brown's Run, Morrison Run and Dutchman Run (#8 on map on page 17).

This project is a comprehensive Coldwater Heritage study of the Brown's Run watershed to collect baseline data on water quality and aquatic health. The goal of the plan is to document threats and recommend protection and restoration efforts in the watershed and its three EV streams.



*Brown's Run is rich in aquatic resources
including threatened and endangered mussels*

Key participants in this study include the US Forest Service, Warren County Conservation District, and Cornplanter Chapter of Trout Unlimited.

Activities and Accomplishments

- Fish monitoring is and macro invertebrate monitoring is in progress for Brown's and Morrison Runs
- Morrison Run subwatershed collections will be completed later in August 2008.
- Dutchman Run subwatershed collections will begin in summer 2009.

Morrison Run Restoration Project

Partner - Sponsor: Cornplanter Chapter of Trout Unlimited

Morrison Run, a tributary to Brown's Run, is located near the City of Warren, PA (#1 on map on page 17). The forests and waters of Morrison Run are recovering from decades of past exploitation from unsustainable timber and industrial development. Morrison Run is classified as an Exceptional Value (EV) stream and holds a significant population of eastern brook trout.

The goal of this project is to restore and improve riparian and in stream habitat. This will result in healthier riparian zones, improved water quality with reduced sedimentation and an expanded range for its native brook trout population.

Specific objectives for this project include:

- Facilitate fish passage around barriers by removal of two dams and redirect the stream channel through an existing bridge and railroad trestle,
- Decommission and / or harden fords on the mainstream,
- Reconstruct portions of a dirt road to reduce runoff,
- Improve and promote recreational activities in the watershed.

Key partners in this project include American Rivers, Western Pennsylvania Conservancy, Warren County Conservation District, US Forest Service, PA Department of Environmental Protection, and private landowners.

Activities and Accomplishments

- Cornplanter Chapter of Trout Unlimited (CC) and US Forest Service met with Buffalo - Pittsburgh Railroad, in July 2008. BPR is supportive of any improvements that might be made near their historic trestle, but offered "no money" to support the effort.
- CC and US Forest Service met with Pennsylvania General Energy and Penelec in July 2008. Both companies are supportive of any improvements that would be made in their power line / pipeline right-of-way and are exploring funding opportunities.
- CC and US Forest Service met with PA Fish and Boat Commission in September 2008 to begin the development a watershed-level plan for improving in stream habitat in the drainage.
- American Rivers is in consultation with PA Fish and Boat Commission and considering funding the design-portion of the two dam removals. WINS partners are considering applying for Growing Greener, National Forest Foundation, and Eastern Brook Trout Joint Venture as well.

- CC members initiated discussions with Wal-Mart on their 1) active community service program and, 2) a small grants program to support nonprofits.
- WINS pre-project monitoring efforts were completed in August 2008.

South Branch Kinzua Creek Acid Remediation Project

Partner – Sponsor: Pennsylvania Fish and Boat Commission

The South Branch of Kinzua Creek Project will use an innovative approach to repairing and maintaining dirt and gravel roads to treat acid precipitation impaired tributaries within the watershed. By resurfacing Forest Service Road 279 segment(s) with a limestone based Driving Surface Aggregate (DSA) and retrofitting parallel storm-water conveyances with Acid Neutralizing Media (ANM) the characteristics of runoff water quality will be improved. The storm water runoff from the resurfaced road segments will result in a reductions in sediment discharged to the watershed, as well as, improved chemical characteristics in each treatment tributary. We expect to increase pH, add alkalinity, and provide additional Acid Neutralizing Capacity. A passive treatment system will also be constructed in the area of Forest Service Road 279 in order to treat three unnamed tributaries that are affected by acid precipitation.



South Branch brook trout

A monitoring project phase will measure storm water runoff characteristics to refine, calibrate, and scientifically document the projects effectiveness. The project may also serve as a demonstration for Best Management Practice (BMP) for Dirt and Gravel Roads that will provide watershed scale Acid Neutralizing Capacity to acid precipitation imparted watershed where natural buffering capacity of soils and geology are lacking.

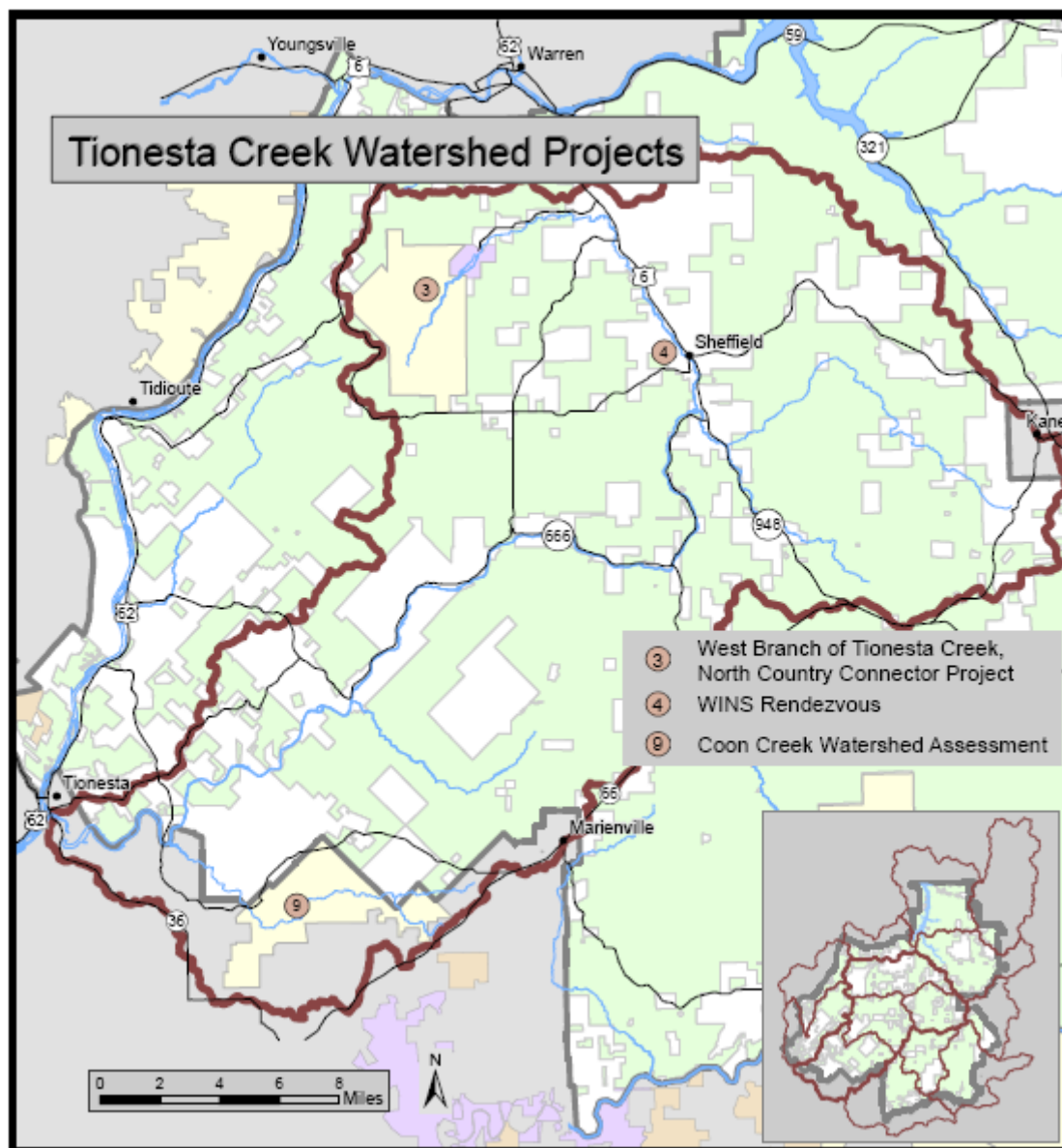
Accomplishments

- PA Fish and Boat Commission and US Forest Service met in April 2008 to plan and coordinate the project.
- PA Fish and Boat Commission and US Forest Service met with Penn State researchers in August 2008 to discuss cooperative monitoring/research opportunities surrounding this project.
- PA Fish and Boat Commission is considering applying for an Eastern Brook Trout Joint Venture monitoring grant.
- Pre-project monitoring was completed in October 2008.
- PA Fish and Boat Commission and US Forest Service are working to identify a pit location for stockpiling limestone/sand.
- PA Fish and Boat Commission is contracting with The Center for Dirt & Gravel Roads to provide design services for the project. A site visit was completed in August 2008.
- US Forest Service Construction & Maintenance Crew is tentatively scheduled to assist with project construction during the first two weeks of June 2009.

Tionesta Creek Watershed Projects



Tionesta Creek at Lynch



The Allegheny WINS Coalition sponsors two stream restoration projects in the Tionesta Creek drainage on the West Branch of Tionesta Creek and Coon Creek

West Branch of Tionesta Creek, North Country Connector Project

Partners – Sponsors: Pennsylvania Game Commission and Pennsylvania DCNR – Chapman State Park

The North Country Connector Trail (NCCT) project is part of a strategy to remediate environmental problems and enhance recreational opportunities in the Upper West Branch Tionesta Creek watershed. The Allegheny WINS Coalition has identified ten sites on SGL 29 and the ANF, including the proposed North Country Connector Trail, that are impacting the water quality of West Branch Tionesta Creek and its key tributaries, largely through sedimentation. This is a significant concern as West Branch Tionesta Creek is classified as a High Quality Cold Water Fishery (HQ-CWF) by the Pennsylvania Department of Environmental Protection and its six main tributaries in the project area are either HQ-CWF (Adam Run, Slater Run, Shaw Run, Tom Run, and Jones Run) or Exceptional Value (Wildcat Run) streams.

Key partners in this project include the Allegheny Outdoor Club, Warren County Conservation District, Allegheny National Forest, DCNR Bureau of Parks, DCNR Bureau of Forestry, and the Pennsylvania Game Commission.

Activities and Accomplishments

- WINS pre-project monitoring fish surveys were completed in July 2008. Macroinvertebrate surveys will be completed in spring 2009.
- USFS, DCNR, PGC and WPC representatives met with Warren County Commissioner, Terry Hawk, Warren County Planning Director, Dan Glotz, and DEP in August 2008 to discuss funding opportunities.
- The NCCT was added to Warren County's Greenways Plan in August 2008.
- Warren County Planning Director, Dan Glotz, having discussions with DCNR on NCCT funding opportunities.
- DCNR, PFBC, and USFS completed a shoreline stabilization project in Chapman State Park in October 2008.
- PGC and USFS will decommission an abandoned road on SGL29 in November 2008.
- PGC's timber sale, and the associated reconstruction of the North Country Connector Trail is planned for bid and contract in summer 2009. Reconstruction of NCCT could be completed as early as fall 2009.
- DCNR, Chapman State Park, has obtained \$15,000-\$20,000 for reconstructing their 1,900-foot portion of the NCCT.
- WPC is heading up the grant application process as partners seek funding for additional restoration activities (e.g., limestoning) in the drainage.
- DCNR is working with PGC and WCCD to apply for Dirt & Gravel Roads funding.

Coon Creek Watershed Assessment

Partner – Sponsor: Iron Furnace Chapter of Trout Unlimited

Coon Creek enters Tionesta Creek just upstream from Nebraska Bridge on the Tionesta reservoir. Iron Furnace Chapter of Trout Unlimited is partnering with other organizations to develop a strategy to address non-point source pollution impacts in the drainage, initiate restoration efforts to benefit highly sensitive Brook Trout populations, and improve stream integrity and sustainability.



The dam at Ward's Ranch Pond raises in stream water temperature and is a complete fish passage barrier

Problems to be addressed in Coon Creek include:

- atmospheric deposition
- acid mine discharges
- leachate originating from a closed landfill
- erosion and sedimentation impacts from acid bearing sandstone based dirt roads associated with expanding oil and gas development
- fish passage and stream temperature issues related to an impoundment
- timber management and harvesting activities
- channel degradation on the mainstream and tributaries (localized) due to changes in hydrology (increased discharge quantity and peak discharge frequency) producing bank instability, sediment transport and substrate embeddedness, channel aggradation, and modification of channel plan-form.



Muzette Road and its network of oil and gas access roads transport sediment into Ellsworth Run, a tributary of Coon Creek

This comprehensive assessment of the Coon Creek watershed will collect essential water quality, biological, and physical data to identify and quantify non-point source problems. The information will be used as a guide for prioritizing these problems and coordinating restoration efforts among cooperating partners.

Activities and Accomplishments

- Iron Furnace Chapter of Trout Unlimited (IFC) applied for Growing Greener funding in summer 2008 to complete a survey/assessment of the drainage.
- As part of their survey effort, IFC will coordinate with PGC to obtain vehicular access to portions of SGL24.
- Bruce Dickson, Headwaters GeoEnvironmental, Ltd., led a Pitt. Pymatuning field school survey in the drainage earlier this summer.

Allegheny WINS Project Funding

April 2007 - 2008

Project	Objectives	Sponsor	Donor	Funding
Clarion River Watershed Projects				
Spring Creek	Eliminate fish passage barriers and/or improve stream crossings, decommission roads, repair and add limestone to dirt and gravel roads to improve drainage and reduce sedimentation; improve instream and riparian habitat	US Forest Service	US FS- Knutzen Vanderburg and Watershed Funds	\$102,000
			Garden Club Federation	\$7,500
			USFS Stewardship Contracting	\$110,000
		Western Pennsylvania Conservancy	National Forest Foundation	\$15,000
			Western Pennsylvania Conservancy	\$50,000
Big Mill Creek	Improve water quality and aquatic ecosystem health by constructing passive treatment pond systems	Elk County Freshwater Association	PA DEP Growing Greener (2007 & 2008)	\$464,000
Clarion River	Address erosion, sedimentation and sanitation concerns related to dispersed recreation	Elk County Commissioners	PA DCNR	\$107,700
Upper and Middle Allegheny River Watershed Projects				
Brown's Run	Establish a baseline dataset, document threats and develop recommendations for protection and restoration of the watershed.	Western Pennsylvania Conservancy	Coldwater Heritage Program	\$5,000
Morrison Run	Remove fish passage barriers, improve instream and riparian habitat	Cornplanter Chapter Trout Unlimited	Sylvania	\$500
			American Rivers	0 *
South Branch Kinzua Creek	Construct passive acid remediation structures on 5-8 tributaries	PA Fish and Boat Commission	PA Fish and Boat Commission	\$120,000
		US Forest Service	US FS- Knutzen Vanderburg and Watershed Funds	\$25,000
Tionesta Creek Watershed Projects				
West Branch Tionesta Creek	Remove fish passage barriers, reduce erosion and sedimentation in streams, link and enhance recreational resources to Chapman State Park, SGL 29 and Allegheny National Forest	Western Pennsylvania Conservancy	PA DEP Growing Greener	0 *
		Chapman State Park	PA DCNR	\$20,000
		PA Game Commission	PA Game Commission	\$218,848
Coon Creek	Conduct a comprehensive watershed assessment to guide restoration efforts and protection plans	Iron Furnace Chapter TU	Proposal submitted	0
TOTAL EXTERNAL FUNDING				\$ 1,245,548

* Funding has been approved for some projects but not yet received

During its first 18 months, WINS coalition partners have made great progress in developing stream restoration projects and assessments, and have conducted numerous education and outreach activities in four major watersheds – the Clarion River watershed, the Upper and Middle Allegheny Watersheds, and the Tionesta Creek Watershed. WINS projects received over \$1.1 million during its first year with other proposals still pending.



Trout in the Classroom

Pennsylvania Trout Unlimited in partnership with the Pennsylvania Fish and Boat Commission's Sportfishing and Aquatic Resource Education Grant program sponsors the Trout in the Classroom program. Through this program, Allegheny WINS partners and TU members team up to work with the youth to ensure that they understand why it is important to protect and restore our coldwater resources.

Trout in the Classroom (TIC) is an environmental education program in which students in grades k-12:

- raise trout from eggs to fry
- monitor tank water quality
- engage in stream habitat study
- learn to appreciate water resources
- begin to foster a conservation ethic
- grow to understand ecosystems

Most programs end the year by releasing their trout in a state-approved stream near the school or within a nearby watershed (not into class A trout streams). During the year each teacher tailors the program to fit his or her curricular needs. Therefore, each program is unique. TIC has interdisciplinary applications in science, social studies, mathematics, language arts, fine arts, and physical education.

Trout Unlimited members work hand-in-hand with teachers and the students to implement the program. The grants provide the school with all of the necessary gear and training to start the program. Each new grant provides the school with \$1000 worth of equipment and supplies – half of which is supported by the local TU chapter. Follow on grants of up to \$300 per year can be provided for replenishment materials and supplies so projects can continue the next school year.

Cornplanter and Iron Furnace Chapters of Trout Unlimited are sponsoring three Trout in the Classroom projects. Each school benefits from technical assistance, field trips, and classroom presentations by Allegheny WINS partners.

Cornplanter Chapter, Trout Unlimited

Youngsville Elementary School, Warren County

Teacher - Ms. Janet Mack

After several months in the classroom aquarium, over 100 brown trout fingerlings were released into Mathews Run, a tributary of Brokenstraw Creek. Although only one Warren County school was the recipient of the grant, 5 classes from different schools were able to benefit from this program. Over 800 students examined the tanks at one point or another. St. Joseph's one of the neighboring schools, held an art contest. At another school, a teacher kept about a dozen fish in his classroom after the stocking for further observation. The students continued to study their behavior, and named each fish. They became so familiar with each fish that they could identify them by individual characteristics.

About two dozen visitors gave presentations to the various classes over the school year, and the kids reacted positively to the messages of the speakers. The students are especially grateful to Ms. Barbara McGuinness, the Environmental Literacy coordinator at the Forest Service's Research Center in Irvine for her assistance.

During the fall of 2008 and into 2009, Cornplanter Chapter TU plans to work with the students on field trips, and hold "work bees" at various sites on Morrison Run, Brown Run, and in the West Branch of Tionesta Creek watershed. There are also plans to help them develop slide shows to document progress of various WINS projects.



Ms. Mack's students and their aquarium

Iron Furnace Chapter, Trout Unlimited**Clarion Area Elementary School, Clarion County****Teacher - Mr. Wayne Kocher**

Students in Mr. Kocher's 4th through 7th grade classes started rearing 220 trout eggs in November 2007 and ended up with 40 brown trout fingerlings in April 2008. After five months of growth in the 55 gallon tank and many lessons on biology and aquatic ecology, the fish were released into Tom's Run at Cook Forest State Park.

Partners who provided technical assistance to this project include Mr. Dale Luthringer and Ms. Sue Reinsel of DCNR Cook Forest, Ken Anderson, Regional Habitat Management Biologist, PA Fish and Boat Commission, Tionesta Fish Cultural Station, and members of Iron Furnace Chapter, Trout Unlimited. Mr. Kocher received a follow-on grant to continue this project into the 2008-2009 school year.



Releasing fingerlings into Tom's Run at Cook Forest State Park

Hickory Grove Elementary School, Jefferson County**Teacher - Mr. John MacBeth**

This new project has been approved for the 2008-2009 school year.

Allegheny WINS Partners

There has been excellent participation and local interest in Allegheny WINS during its first year. Our partners are the driving force behind the coalition. Much of the work is done by volunteers from various organizations. Their efforts and support are greatly appreciated.

Non-profits

Allegheny Outdoor Club
Brokenstraw Watershed Council
Elk County Freshwater Association
Garden Club of Pennsylvania
Kinzua Fish & Wildlife Association
The Nature Conservancy – PA & CW NY
Pennsylvania Council of Trout Unlimited
Pennsylvania Council of Trout Unlimited – Allegheny Mountain Chapter
Pennsylvania Council of Trout Unlimited – Cornplanter Chapter
Pennsylvania Council of Trout Unlimited – Black Cherry Chapter
Pennsylvania Council of Trout Unlimited – Iron Furnace Chapter
Pennsylvania Environmental Council – Northwest Office
University of Pittsburgh, Bradford Campus – Environmental Studies Club
Western Pennsylvania Conservancy – Allegheny Field Office

County Agencies

Elk County Conservation District
Elk County Planning Department
Forest County Conservation District
McKean County Conservation District
Warren County Conservation District
Warren County Adult Probation & Parole

State Agencies

Pennsylvania DCNR – Bureau of State Parks
Pennsylvania DCNR – Bureau of Forestry
Pennsylvania DEP – Northwest Regional Office
Pennsylvania Department of Transportation – Engineering District 2-0
Pennsylvania Fish & Boat Commission – Division of Habitat Management
Pennsylvania Game Commission – Bureau of Wildlife Habitat Management
Pennsylvania State University – School of Forest Resources

Federal Agencies

US Army Corp. of Engineers – Kinzua Dam
US Forest Service – Allegheny National Forest
US Fish and Wildlife Service – Pennsylvania Field Office
US Geologic Survey – Leetown Science Center, Aquatic Ecology Branch